

Role of Music Therapy on Anxiety

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Abstract: *In the present times, all are engaged in their tight schedules and devote least of it to one's health and recreation. Thus the outcomes are unpleasant and unacceptable for us. Due to heavy work stress, need for jobs, study burden and many other reasons exaggerates body's response by exhibiting signs of anxiety. Overwhelming anxiety in daily life routine is not normal. It may result in other associated features with negative behavioural and cognitive changes among human beings. In order to relieve the symptoms of anxiety in their day to day activities, numerous alternative measures such as relaxation therapy, yoga, meditation, sleep therapy and many more are available which have favourable results for living beings.*

Keywords: Music Therapy, Anxiety, Anxiety Reduction, Stress Management, Emotional Regulation.

I. INTRODUCTION

Music is a collection of melodious sound or sounds which provide pleasing experience and exaggerate the emotions too. Since the ancient times the people practice to engage themselves in the field of music in order to regain same potential and vanity by receiving joy and delightment. Along with this music has the ability to suppress stress faced by us in our day to day activities. Thus, it brings equilibrium in one's life, as the person starts reacting equally to the positive and negative situations of life. The chirping of birds, sounds of waterfall, woodpecker drumming and many more natural rhythmic melodies not only heel stress but also furnish internal relief to the recipient.

The origin of music is unknown as it has occurred prior to the recorded history. Some suggest that the origin of music was like stems from naturally occurring sounds and rhythms. In the pre-historic period, human beings practiced to flourish distinct types of musical instruments like "vana", "Nadi", "dumdubhi" and many more to compose contrastive/variant musical sounds and rhythms. It was a distinctive way to rejoice their lives. The Vedas also described the ancient history of music in India through which we perceive the passion and enthusiasm present among the Indians for music [1].

But with passage of time, human beings got so indulged in professional and social activities that they forgot to devote time for themselves. The excessive burden of education, jobs, career and yeah for success has overwhelmed the other likings and interests of the human beings. Presently, they are behaving like robots than living beings. The internal spirit has vanished and has left behind the mental stress, anxiety and depression which further gave birth to high incidence rates of diseases and deformities. As it is rightly said, persons with physical illness recover earlier than those of psychological ones.

Music means an art of combining sounds of varying pitch to produce a coherent composition that is melodious, harmonious and expressive of ideas and emotions whereas therapy means the treatment measures available to treat and cure physical or psychological illness. So collectively music therapy can be defined as the systematic method of treatment in which physiological and psychological effects of musical sounds and melodies are arranged according to various psychological disorders. According to American Music Therapy Association (AMTA) it is defined as the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program [2].

Numerous researches in this field has been done which indicate that music creates balance between mind, body and soul, has positive effects on pain and anxiety, and increases quality of life of sick or healthy individuals. It is also considered as a systematic method of treatment in which physiological and psychological effects of musical sounds and melodies are received according to various physical and mental disorders. According to Gencel, it is a guiding communication method in identifying psychological state of adults and children who have psychological and physical problems [3].

Not only this, Florence Nightingale also emphasised on the importance and beneficial effects of music therapy. She involved it with other nursing interventions while providing care to the soldiers of the first and Second World War with an aim to relieve the pain and anxiety as well as to encourage their comfort too. In "Notes on Nursing" (1854) she exclaimed the various types of music that can be helpful as well as those that can be harmful to the hospitalized patient [4]. This depicts that the origin of music therapy has a great history and a powerful background.

Many of us worry from time to time. We feel anxious about job interviews, or get nervous about social gatherings. Most of the time these type of feelings are normal or even helpful as they may give us a boost of energy or help us to focus. But if such feelings get overwhelmed may even breed the sign and symptoms of anxiety disorders. People with these disorders have feelings of fear, stress and uncertainty that interfere with their everyday activities. The incidence rate of anxiety and anxiety disorders among human beings is raising its height day by day.

MUSIC THERAPY

Music Therapy is the practice of operating music and musical interventions for the aim of restoring, maintaining and uplifting the emotional, physical, and psychological health and well-being. Music has the power to soothe, inspire, energize, uplift and to provide a calming distraction from troubleshooting situations. The thought of operating music as a healing influence or medicine, which could affect health and behaviour is as least as old as the writings of Aristotle and Plato [5]. During the Palaeolithic period, nearly about 10,000 to 50,000 years ago, the shamanic traditions were practiced to manage and cure the disease victims by combining music with early healing [6]. These traditional methods were prevalent in most ancient cultures of the world – in Africa, China, Japan, Korea, Viet Nam, Taiwan, and other Asian countries too (Hawkins, 1994) [7].

Furthermore, Cook (1981) also explored the references to music and healing which have been recorded in the Bible, the writing of Plato, Confucius, and Aristotle. In the holy book of Bible numerous examples of the therapeutic effects of music are described. One in particular is of David playing his harp to the mad Saul, restoring him to his self and to reality [5]. Further, in ancient Greece, the power of music was well-recognized and had widespread perception. They believed that music has the ability to change the social order and was thought to have the power to heal too [8].

Throughout the Middle Ages, (476-1450 A.D.), the Greek believed in the curative powers of music and accepted it as medicine; however, when the Renaissance era came, music's therapeutic effects were then questioned. The physicians, doctors and scientists of this era made great advances in anatomy, physiology, and clinical medicine, which gave birth to the scientific approach. Therefore, the therapeutic use of music increasingly lost its value [9].

The evolution of the music therapy as a profession came into existence in the countries like United States before the twentieth century and was practically applied in the country in the late eighteenth century for the care of mentally and physically ill patients. The practice was noticed by the two anonymous articles which were published during that time and made references to the idea of utilising the music in a therapeutic capacity in order to heal sick persons. The first was "Music Physically Considered" which was found in The Columbian Magazine in 1789 [10]. The examples were illustrated for explaining the fact that a happy change is produced in the body, by the power of music. The second article was "Remarkable Cure of a Fever by Music" was published in New York Weekly Magazine in 1796, [11] which granted the information and explanation about therapeutic use of music. There are numerous newspaper articles, journal articles, essays, and treatises on using music as therapy published throughout the world with an idea to promote it.

In the 1940s, doctors and therapists realized that when patients listened to music it fostered a 25 soothing effect, or more specifically the lowering of blood pressure, which in turn lead to reduced anxiety and alleviated pain of the patients. Later in the 20th century it gained the public exposure as it was brought into service by applying on veterans of World War I and World War II with an attempt to mitigate the physical and psychological trauma faced by them [12].

Music therapy is a powerful and non-invasive medium to reduce pain, anxiety, and depression. It can be accustomed for children as well as adults. A sample of it is a randomized study by Chan et al., on 47 people under the age of 65 who underwent music therapy compared to 24 controls. They observed that, in case of the music group, there was a statistically significant reduction in depression scores ($p < 0.001$), blood pressure ($p < 0.001$), and heart rate ($p < 0.001$) after 1 month ($p < 0.001$). An implication of this observation is that music can be an effective intervention for older patients too [13].

There are numerous challenges present in the path of application of music therapy which makes it tough for implementation. In a review article by Nilsson, he described the challenges faced by nurses as they care for the needs of hospitalized patients, and they often have to prioritize physical care over the patient's emotional, spiritual, and psychological needs. In clinical practice, music intervention can be used as a tool to support these needs by creating an environment that stimulates and maintains relaxation, wellbeing, and comfort. Furthermore, the Nilsson's article presented a concrete recommendation for music interventions in clinical practice, such as "slow and flowing music, approximately 60 to 80 beats per minute", "non-lyrical", "maximum volume level at 60 dB", "patient's own choice, with guidance", "suitable equipment chosen for the specific situation", "a minimum duration of 30 minutes in length", and "measurement, follow up, and documentation of the effects" [14]

ANXIETY

Feeling worried or nervous is a normal part of everyday life. Everyone frets or feels anxious from time to time. Mild to moderate anxiety can help you focus your attention, energy, and motivation. Anxiety is defined as a "transitory emotional state or condition of the human organism that is characterized by subjective, consciously perceived feelings of tension and apprehension, and heightened autonomic nervous system activity" (Spielberger, 1983). The causative agents of anxiety are endless and varies from person to person and conditions too. It does not have any age restriction for its exhibition as it is presented by almost all age groups. The act of presentation of sign and symptoms may be abrupt or slow with veracity. Anxiety has various physiological manifestations such as palpitations, trembling, shortness of breath, chest pains, nausea and vomiting. Emotional and behavioural manifestations include restlessness, irritability, apprehension or dread, difficulty concentrating and tension [15]. If anxiety is severe, one may have feelings of helplessness, confusion, and extreme worry that are out of proportion along with the actual seriousness. It is associated with both physiological and psychological complications. It can also increase respiratory rate, blood pressure and heart rate, and lead to nausea if studied clinically.

Anxiety is a mood state associated with anticipation for possible upcoming negative events (Barlow, 2004). While anxiety is a natural human response and adaptive warning mechanism, uncontrollable and excessive manifestations of the condition can develop into a pathological disorder (Cleveland Clinic, 2010). A momentary feeling of apprehension from heightened autonomic nervous system activity is considered to be 'state anxiety' while the predisposition to perceive ambiguous situations as highly threatening is referred to as 'trait anxiety.' Trait anxiety frequently leads to an anxiety disorder (Funder, 2012) [16-18].

Anxiety is a prevalent symptom experienced by patients admitted to various health care settings. In acute health care settings, patients experience high levels of anxiety prior to any procedure (Nisenon LG, Pepper CM, et al. 1998) [19]. The anxiety is related to a fear of death and disfigurement, loss of control and fear of being in an unfamiliar environment. Even minor surgical procedures can produce significant levels of anxiety and affect post-operative recovery time (Lee et al., 2004) [20].

Whereas, the intensive care unit is different from other departments of the hospitals in terms of the treatment methods and technical equipments used, physical appearance, and the nature of sensitive environment. Whenever any important function of patients decline in a very risky manner, they need to receive treatment in an intensive care unit with a view of maintaining vital functions and applying special treatment methods which are needed (Aslan and Ozer, 2010) [21]. Patients in such units experience change in their comfort levels. Some reasons increase the anxiety level such as surgical procedures, intubation, and ventilation; changes in environment; and movement restriction caused by the existence of invasive and non-invasive tools as described in a research studies by Eti Aslan and Karadağ, 2007; Tracy and Chlan, 2011 [22-23].

The various other invasive procedures are performed on the patients those who stay in hospitals or long-term care facilities during their hospitalization. The procedures could vary from routine blood draws, intravenous infusions, urinary catheter insertion to more complex procedures such as chest tube or central line insertion. The act of performing such invasive procedures could induce significant levels of anxiety among the receivers which further leads to delayed response to care and treatment. (Leach, Tanner & Zernicke, 2000) [24].

Now a days, hospitals mostly focus on alleviating medical interventions and decreasing hospital stays, therefore, patients receive less psychosocial support during hospital stay thus experience increased levels of anxiety (Norred, 2000). It has various physiological manifestations such as palpitations, trembling, shortness of breath, chest pains, nausea and vomiting. Emotional and behavioural manifestations include restlessness, irritability, apprehension or dread, difficulty concentrating and tension [25].

Anxiety is associated with both physiological and psychological complications. It can increase respiratory rate, blood pressure and heart rate, and lead to nausea. It is also associated with negative behavioural and cognitive changes. Many of these anxiety-related complications contribute to adverse outcomes resulting in longer recovery times (Cooke et al., 2005), [26] Some other contrary outcomes include greater anaesthetic requirements, need for increased doses of pain medication, longer hospitalizations and a higher likelihood of post-surgical morbidity (Lee, Henderson & Shum, 2004) [27].

ANXIETY AND MUSIC THERAPY

Now a days, Music therapy has been established as a complementary therapy that uses music to achieve therapeutic outcomes. It is administered effectively by various health care professionals, including nurses, in the clinical and sub-clinical settings. Music therapy has been linked to cognitive, emotional and physical well-being of the receivers. Scholars agreed that many of the therapeutic possibilities of music melody are due to its influence in the living process of the human beings. It was born from their mind and emotions that provides it the ability to realize and attain changes in them (Arruda, 2005). This reaction could be a valuable finding for the healthcare providers of the patients in hospital environment, especially in Intensive Care Units (ICU), where normally patients develop stress and anxiety sensations due to the high complexity in the environment (Backes, 2003) and encircled with imaginary ideas of life, ending thoughts when they have to deal with difficult and unknown situations (Leao et al., 2010; Souza and Marcheti, 2006). In this environment the music is readily able to influence and transform the context, the behaviour and also the feelings of the people. (Backes, 2003) [28-30].

As it is rightly said that music exhibits the power to enhance the well-being and distract patients from unpleasant symptoms therefore, applied by health care personals in patient management. Although there are wide variations in individual preferences, even then music appears to exert direct physiologic effects through the autonomic nervous system. It also has direct effects by modifying caregiver's behaviour. Music effectively reduces anxiety among people. It has potential to improve the mood of medical and surgical patients and is applicable for patients in intensive care units or those who are undergoing procedures.

With the passage of time, Music therapy is becoming a well-researched and established complementary therapy due to its positive effects on patient outcomes. Bradt and Dileo (2013) indicated that listening to music in persons with coronary heart disease may too have a beneficial effect on anxiety, especially those suffering with a myocardial

infarction. In another systematic review Bradt and Dileo (2014) indicated in a systematic review that music listening in mechanically ventilated patients' in critical care units may have beneficial effects on their state anxiety.

In summary the advantageous effects of using this therapy for managing anxiety can be enlisted as:

It is safe and not associated with any adverse effects.

It is easy to implement.

It is less expensive to administer than other types of conventional therapies.

Its application requires minimal involvement by health care professionals.

It can be absorbed without any effort on the part of the listener.

It provide relaxation to mind, relieves unwanted stress and promotes calm and quite feelings in the receivers.

Music is a big ally in the nursing care humanization, as a result of the findings exposed earlier in this article, which validated that music therapy effects go further than patient's emotional aspects, interfering directly in physiological functions, and contributes to affective relationship between patients and their family.

II. CONCLUSION

Anxiety is easily reflected by the face and eye contact. As the person receives music as a therapeutic aid; he/she begins to develop self- confidence and also maintains eye contact because it is not only received as a booster dose to boost up the mind and spirit but also to tackle aside the daily problems and tricky situations of our life. Music being a vast field of knowledge, patience, love with nature and natural beauty, therefore can easily help in overcoming anxiety and other related symptoms.

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